PRD: Product Retail API

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Change history:
- Document created 3/5/2024

Overview:
- This will be a back end application programming interface, which will serve the front end functionalities of an online store. Specifically, an online store to purchase video games, which will allow users to create accounts and sign in, purchase video games, and to leave reviews.

Objectives:
- Creation of an API which will do the following:
  - Manage new user registration and signing in
  - Manage data about products
  - Manage order information
  - Manage reviews
- To ensure data retention, creation of a sqlite database and a schema with tables for each of the 4 bullet points above.
- Validation and handling erroneous inputs by the user, by implementing custom exceptions and functions that check certain conditions.
- Ensuring CRUD functionality.
- Setup unit testing
- Provide a sample database with some data inputted

Success Metrics:
- Completion of all python files which create the API
- Unit testing working with intentional incorrect parameters to ensure that the implemented exceptions are raised
- A database populated with data that all relates to one another in some way

Messaging:
- The deliverable of this product will be an API and a database schema which will now allow for back end functionality to a front end interface.

Timeline and Release Planning:
- Release Date: 3/7/2024

Personas/Scenarios:
- Jenny, an avid online shopper, prefers sites with a nice user interface as well as a quick purchasing/checkout process. She also prefers to look at product reviews before making a purchase.
- Jason, a fan of video games, likes to use the internet as an easy way to purchase video games, instead of going to the store.

Features In:
[M] denotes minimum viable experience requirement
- User authentication/authorization [M]
- Ability to make purchases
- Management of products
- Ability to leave reviews
- Data validation to ensure integrity

Features Out:
- Backup functionality

Designs:
- Entity-Relationship Diagram

Open Issues:
- None at the moment